Resistance Wire

Product Highlights

✓ Same Multi-Stranded Wire We Use In Our High Quality Heating Element

✓ Provides Greater Flexibility and Durability Than Solid Strand Wires

✓ Flexible up to a 1/16” (1.6mm) Radius

✓ 500ft (152m) or 1000ft (305m) Standard Spools Sizes

RWK Polyimide Film Insulated Resistance Wire:
Specifications:
• Insulation type: 1 mil polyimide film with 50% overlap
• Insulation thickness: 2 mil
• Dielectric strength: Over 2000 volts
• Suitable for use on conductive surfaces
• rated to 482°F (250°C), 600VAC, AWM 5417

RWF Fiberglass Insulated Resistance Wire:
Specifications:
• 1100°F (593°C) maximum continuous exposure temperature
• Insulation type: Two layers of 8 mil diameter strands of fiberglass yarn
• Dielectric strength: Over 2000 volts
• Not suitable for conductive surfaces
• Optional PTFE coating provides anti-fraying and abrasion resistance

RWG Grounded Resistance Wire:
Specifications:
• Patented grounded braid through entire length of heating element
• Insulation type: 1 mil polyimide film with 50% overlap
• Insulation thickness: 2 mil
• Two layers of 8-mil diameter fiberglass braided over polyimide film
• Dielectric strength: Over 2000 volts
• Suitable for use on conductive surfaces
• Optional PTFE coating provides anti-fraying and abrasion resistance
• rated to 482°F (250°C), 600VAC, AWM 5418
**Getting Started**

**Ordering Information**

When specifying resistance wire, it is important to consider all aspects of the application and of the wire. For example, if the application is on a conductive surface, wire type RWF should not be chosen. Also, if the application requires constant temperatures of 350°F (176°C), then alloy K should not be chosen. Call your local distributor or BriskHeat® for application assistance.

**Part Number Guide**

- **Resistance Wire Type:**
  - RWK- (Polyimide Film Insulated), RWF- (Fiberglass Insulated), RWG- (Grounded)
- **Number of Strands:** (see below tables)
- **Alloy Type:** (see below tables)
- **Resistance per Foot:** (see below tables)
- **Optional Coating:**
  - T- [PTFE] (RWF and RWG only), Blank- (None)
- **Spool Size:** A- (500ft [152m]), B- (1000ft [305m])

**Alloy Specifications**

<table>
<thead>
<tr>
<th>Alloy Type</th>
<th>Gauge/Strand</th>
<th>Max Exposure Temperature</th>
<th>Ohms/FT/Strand</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>43</td>
<td>1650°F (899°C)</td>
<td>175.00</td>
<td>71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu</td>
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<tr>
<td>B</td>
<td>41</td>
<td>1650°F (899°C)</td>
<td>115.31</td>
<td>71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu</td>
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<tr>
<td>C</td>
<td>40</td>
<td>1650°F (899°C)</td>
<td>88.18</td>
<td>71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu</td>
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<tr>
<td>D</td>
<td>40</td>
<td>1650°F (899°C)</td>
<td>70.24</td>
<td>60% Ni, 15% Cr, 25% Fe</td>
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<tr>
<td>E</td>
<td>39</td>
<td>1650°F (899°C)</td>
<td>55.10</td>
<td>60% Ni, 15% Cr, 25% Fe</td>
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<tr>
<td>F</td>
<td>37</td>
<td>1650°F (899°C)</td>
<td>33.33</td>
<td>60% Ni, 15% Cr, 25% Fe</td>
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<tr>
<td>G</td>
<td>37</td>
<td>1022°F (550°C)</td>
<td>14.52</td>
<td>55% Cu, 45% Ni</td>
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<tr>
<td>H</td>
<td>37</td>
<td>1000°F (538°C)</td>
<td>8.88</td>
<td>78% Cu, 22% Ni</td>
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<tr>
<td>I</td>
<td>37</td>
<td>797°F (425°C)</td>
<td>4.44</td>
<td>88% Cu, 12% Ni</td>
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<td>K</td>
<td>36</td>
<td>300°F (149°C)</td>
<td>0.43</td>
<td>96% Cu (core), 4% Ni (cladding)</td>
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**Resistance Per Foot**

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<tr>
<th>Alloy Type</th>
<th>A</th>
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<th>D</th>
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<th>F</th>
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**Ohm’s Law**

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